Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS ONE CAPITOL HILL PROVIDENCE RI 02908

> CREATION DATE: 11-APR-13 BID NUMBER: 7461354,2

Replace Cooling Compressors A/C System, DOA

BID CLOSING DATE AND TIME:30-APR-2013 01:45:00

401-574-8125 PHONE #:

Ohara 2nd, John F

В DOA CONTROLLER ONE CAPITOL HILL, 4TH FLOOR L

BUYER:

L

SMITH ST PROVIDENCE, RI 02908

US 0

Requistion Number: 1308695

Н DOA CENTRAL SERVICES SPECIAL INSTRUCTIONS P SEE BELOW, RI N/A US

Amendment Description: Addendum Number Two Unit Total Quantity Unit Description Price Line BIDDER IS REQUIRED TO PROVIDE A BID SURETY IN THE FORM OF A BID BOND, OR A CERTIFIED CHECK PAYABLE TO THE STATE OF RHODE ISLAND, IN THE AMOUNT OF A SUM NOT LESS THAN FIVE PERCENT (5%) OF THE BID PRICE, BID SURETY MUST BE ATTACHED TO THE BID FORM. THE SUCCESSFUL BIDDER WILL ALSO BE REQUIRED TO FURNISH PERFORMANCE AND LABOR AND PAYMENT BONDS AT TIME OF TENTATIVE CONTRACT AWARD. Please see the attached (3) pages. Addendum Number Two Please review the attached (6) pages of Addendum Number Two. These specs replace the orignal package. NOTE: We are now requesting you replace the existing compressor with a new 60 Ton Screw Type. Due to the issuance of this Addendum Number Two we are having a 2nd Mandatory Pre-Bid Conference and the Bid Closing Date and Time has been extended. ALL vendors who which to bid on this project MUST ATTEND this 2nd Mandatory Pre-Bid Conference to be held on: Wednesday 4/17/13 at 2:00 PM 50 Service Ave. Warwick RI Meet at the Front Entrance The Bid Closing Date and Time has been changed; from: 4/18/13 at 1:45 PM To: 4/30/13 at 1:45 PM **TOTAL** TOTAL COST FOR THE REPLACEMENT OF THE 1.00 1 COOLING COMPRESSORS FOR A/C SYSTEM WITH A NEW 60 TON SCREW TYPE UNIT WORK TO BE PERFORMED AT 50 SERVICE AVE WARWICK, RI

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It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Administration DIVISION OF PURCHASES One Capitol Hill Providence, RI 02908-5855 Tel: (401) 574-8100 Fax: (401) 574-8387

Website: www.purchasing.ri.gov

April 11, 2013

ADDENDUM NUMBER TWO

RFQ # 7461354

TITLE: Replace Cooling Compressors A/C System, DOA

Closing Date and Time: 4/30/13 at 1:45 PM (Note Change)

Per the issuance of this <u>ADDENDUM #2 (6) pages, including the cover sheet</u>) the following change(s) are noted:

Please be advised the Bid Closing Date and Time has been extended to:

From: 4/18/13 at 1:45 PM To: 4/30/13 at 1:45 PM

X Specification Change /Addition / Clarification

Attached are Revised Specifications for this Solicitation.

NOTE: We are now requesting you replace the existing compressor with a new 60 Ton Screw Type.

Due to the issuance of this Addendum Number Two we are having a 2nd Mandatory Pre-Bid Conference and the Bid Closing Date and Time has been extended.

ALL vendors who which to bid on this project MUST ATTEND this Mandatory Pre-Bid Conference to be held on: Wednesday 4/17/13 at 2:00 PM 50 Service Ave.

Warwick RI Meet at the Front Entrance

The Bid Closing Date and Time has been changed; from: 4/18/13 at 1:45 PM
To: 4/30/13 at 1:45 PM

Vendor is advised the attached four (4) pages replace the original bid requirements completely.

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April 11, 2013

REVISED SPECIFICATIONS FOR BID 7461354

New Compressors 50 Service Avenue

Base Bid

Remove and replace existing compressor on Trane Climate Changer Chiller for cooling unit serving first and second floor in the boiler room. Replace existing compressor with new 60 ton screw type (Trane or approved equal). Fabricate prime and paint support for the new compressors.

Replace all necessary components and controls. Replace TXV with electronic expansion Valve and install new Trane Tracer microcomputer-based controller. This unit shall microcomputer-based controller that can be monitored all necessary points and be controlled from a remote location. This controller will stage on the unit as load necessitates. Recharge with refrigerant and commission unit.

Include all necessary controls, VFD drive, control wiring and power wiring, (Voltage is 460 volt 3 phase) controllers, compressor related materials, refrigerant and all necessary labor.

HANBELL Compressor Performance Report

INPUT

Refrigerant: R22

Model: RC2-200B

Power supply: 460V-3-60Hz

Evaporating SST: 35 Deg. F

Condensing SCT: 120 Deg. F

Liquid subcooling 10 Deg. F

Suct. gas superheat 10 Deg. F

Useful superheat: 10 Deg. F

Disch. temp. expected: 176 Deg. F

Partial capacity load: 100 %

OUTPUT

Cooling capacity: 616.3 kBTU

Operating mode: Standard

Liquid temp.: 110.0 Deg. F

Evaporator capacity: 616.3 kBTU

Mass flow ECO: ----

Condenser capacity: 765.8 kBTU

Power input: 59.0 kW

Subcooler load: ----

Current: 84.6 A

sat ECO Temp.: ----

COP/EER: 10.439

ECO pressure: ----

Mass flow LP: 9201.4 lb/h

Oil volume flow: 4.45 GPM

Mass flow HP: 9241.3 lb/h

Oil cooler out: 126.4 Deg. F

٧i : 2.6 Oil cooler additional cooling: 51.92 kBTU

L.I. to chamber mass flow:

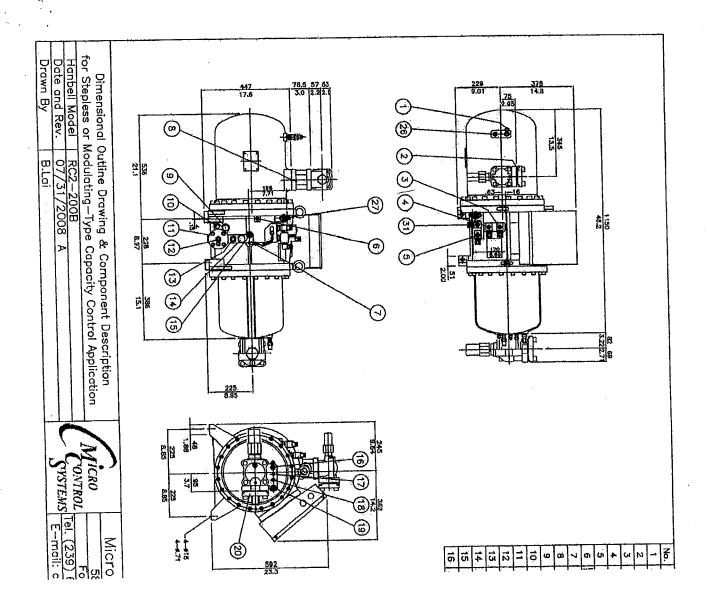
Additional power input for L.I.: ----

L.I. to motor mass flow: 39.82 kg/h

L.I. to chamber capacity: ----

L.I. to motor capacity: 2.7 kBTU

DG w/o cooling: 202.1 Deg. F



RC2-200B Screw Compressor

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	Displacement	ft³/hr	60 Hz	8228	
Ī	Rated Speed	Rpm	60 Hz	3550	
Compressor	Volume Ratio	VI		2.6 (standard other VI available)	
	Capacity Control	%		25%,50%,75% & 100% Step Capacity Control, 50%~100% Continuous Stepless Capacity Controls	
	Lubrication	<u> </u>		Differential Pressure Feed Lubricant	
Mater	Түре			3 Phase, 2 Pole, Squirrel Cage, Induction Mot	
	Insulation	1		Class F	
	Protection			3 PTC Protection 1 per winding	
Lubricant Charge	Gallons	1	2.1		
Oll Heater	Watts	1		150	
Hydrostatic Pressure test	lb/in²G	1		597	
Welght	Pounds	1	937		
Crated Weight	Pounds	7		1197	
Crate Dimensions	Inches			\$0x26x31	

Standard Compressors Accessories

- Modulating Slide Capacity
- Weather Proof Terminal Box for outdoor applications
- 115/1/60 Control Voltage
- 115/1/60 Crankcase heater
- Discharge Check Valve

Connect ions

- Discharge Crieck Valve
 Discharge Service Valve (Discharge Stop
 Valve) with standard connection sizes and
 supplied with flanges and bushings
 Suction Service Valve (Suction Stop
 Valves) with standard connection sizes
 and supplied with flanges and bushings
- Oil Level Float Switch
- Suction Filter
- Oil Filter
- PSI Relief Valve
- Oil Sight Glass
- PT1000 for Reading Motor Temp
- INT69HBY supporting motor and discharge (PTC) temperature sensor protection as well as Phase Loss and Phase Reversal at Start Up Only

Ports

- External Oil Cooler
- Liquid injection (into screw chamber)
- Economizer
- Suction, Discharge & Oil Service

		7		m
Discharge Stop Valve	1 1/2"			
Discharge Check Valve	1 1/2"			
Suction Stop Valve	Suction Stop Valve 2 1/2"			_ _
Economizer	5/8" solder]		
Liquid injection (chamber)	5/8° flaré	A	В	C
Discharge Side	Copper Pipe Sizing 1 5/8"	2,05"	2.95*	1.38*
Suction Side	Copper Pipe Sizing 2 5/8"	2.36	4.33	1.38"

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		R	22, R407C, R404	A, R507A, R134a		
Mayin		Maximum	Y-A		Part Wind Start	
4	Continuous	Locked Rotor Amps (Y)	Locked Rotor Amps (D)	Locked Rotor Amps (D)	Lacked Rotor Amps (DD)	
- 60	220	266	310	930	445	840
60	460	127	162	485	239	450

5877 Enterprise Pkwy, Fort Myers, FL 33905 USA Phone: (239) 694 0089 - Fax: (239)694 0031 www.mcscontrols.com - support@mcscontrols.com